

Sole

Sole, as a species, belong to several families, of which the most prominent is the *Soleidae* (Jordan & Goss, 1886). However, they fall within the larger family of Flounders as well as in the family of *Soleoidei* (Jordan & Goss, 1886). The species commonly known as 'sole' is the species *Solea solea*, also known as common sole or Dover sole (Jordan & Goss, 1886). *Solea solea* is also the only



species of sole in the North Sea and Wadden Sea (Engelhard et al., 2011). Though Sole is not considered a migratory species, the population has shifted within the North Sea and Wadden Sea to different locations within (Engelhard et al., 2011).

History/ Population trends

In the past decades, shifts have occurred in where Sole is most prominently found (Engelhard et al., 2011). Sole, as a population, have moved more towards the most southern parts of the North Sea for past 9 decades (Engelhard et al., 2011). In the 1920's and 1930's, Sole was found in abundance throughout the Wadden Sea and surrounding North Sea area (Engelhard et al., 2011). In the 2000's, an abundance of Sole was only found in the most southern parts the Dutch North Sea (Engelhard et al., 2011).

The total population size of Sole has significantly decreased since the peak of population size in the 1960's (ICES, 2024). There was a small increase in population size between 2020 and 2021 (ICES, 2024). This increase of Sole brought the total population over the Maximal Sustainable Yield (MSY) once more (ICES, 2024). In the last years the population has decreased again, now bordering the MSY (ICES, 2024). Noticeably though, the total yearly landings have decreased steadily over the last 3 years (ICES, 2024).

Miscellaneous

- Sole have a brown coloring with a single black spot on their pectoral fins and reach an average length of 50cm (Encyclopaedia Britannica, 1998).
- The most Sole ever caught in a single year is 35121 tons of Sole (ICES, 2024). The total allowable catch that was decided upon that year (1990) was 25.000 tons of Sole (ICES, 2024). This results in a total over-catch of about 171.2%.

Diet

- Annelida (Teixeira & Cabral, 2010)
- Bivalves (Teixeira & Cabral, 2010)
- Other detritivores (Teixeira & Cabral, 2010)
- Crustaceans (Teixeira & Cabral, 2010)
- Starfish (Teixeira & Cabral, 2010)
- Sandeel (Teixeira & Cabral, 2010)
- Small fish (Teixeira & Cabral, 2010)

Sources

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